

living with HIV; moreover it could reduce the incidence and death rate of tuberculosis.

R Colebunders *professor, infectious diseases*

Department of Clinical Sciences, Institute of Tropical Medicine and University Hospital, 2000 Antwerp, Belgium

M L Lambert *research assistant*

Department of Public Health

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## Epidemiology of HIV in China

*Intravenous drug users, sex workers, and large mobile populations are high risk groups*

The first case of AIDS in China was diagnosed in 1985, heralding the HIV epidemic in mainland China. As of 30 September 2001 the Chinese Ministry of Health reported a total of 28 133 people infected with HIV, of whom 1208 had developed AIDS and 641 died. The actual number of HIV infected people in the mainland, however, is perhaps more than 600 000. UNAIDS says that China could have 10 million people with HIV or AIDS by 2010. China has been pushed into action after the number of people with HIV surged by 67.4% to 3541 in the first half of 2001.

The subtypes of HIV-1 found in China include B, Thai B, A, C, D, E, F, G, and BC and BB recombinants.<sup>1-3</sup> However, the epidemiological distribution and relative importance of these subtypes need further study.

China's HIV/AIDS epidemic can be divided into three phases. The first phase, in 1985-8, involved a small number of imported cases in coastal cities—mostly foreigners and overseas Chinese. Four people with haemophilia from Zhejiang province also got infected with HIV after using imported factor VIII. The second phase, from 1989 to 1993, began with finding HIV infection in 146 drug users among minority communities in Yunnan province in the south west, adjacent to the "Golden Triangle" bordering Myanmar, Laos, and Vietnam. The third phase began in 1994, when a number of infections were reported among drug users and commercial plasma donors. By 1998 HIV infection had been reported from all 31 provinces, autonomous regions, and municipalities under control of the central government. Though drug users account for 60%-70% of reported HIV infections, the number of infections through heterosexual transmission has increased steadily to 7%.

### HIV/AIDS surveillance system in China

The national surveillance system has three components

- (1) National disease reporting programme for 35 notifiable communicable diseases that covers the entire population
- (2) 145 national disease surveillance points covering 1% of China's population in 31 provinces, regions, and municipalities
- (3) Several disease specific surveillance systems including one for HIV infection and AIDS

Additionally, 42 national HIV-AIDS sentinel surveillance points have been established in 23 provinces since 1995.

Data on HIV infection and AIDS in China are obtained from a national surveillance system (see box). HIV transmission in China has been mainly due to misuse of injectable drugs and unsafe sexual practices. Moreover the current epidemic of sexually transmitted diseases is fuelling the AIDS epidemic.

Opium smoking has long been popular in China, but abuse of psychoactive drugs is relatively recent. Heroin addiction began in the early 1980s, prompting much government and media attention. The ministry of public security passed a regulation that required every drug user to be registered and undergo a detoxification programme in an incarcerated setting for three to six months. Despite such extreme measures, the relapse rate has been very high—around 90%. There were over 900 000 registered drug users in China in 2001. However, the real number of drug abusers is perhaps several times higher. According to data from the

surveillance system in 2001, the proportion of injecting drug users is around 60%; 30% of these share needles.

Prostitution was common before the successful patriotic health campaign programme in the early 1950s to eliminate it.<sup>4-5</sup> In the 1980s the commercial sex industry emerged again in coastal cities and gradually extended inland.<sup>4-7</sup> The number of sex workers and their clients arrested in the late 1990s was around 700 000. Being poorly educated and afraid of being arrested, these women are vulnerable to HIV infection and other sexually transmitted diseases and are difficult to target for prevention. The average usage rate of condoms among them is 30%.<sup>7</sup> Use of condoms depends on the customer. Some programmes have attempted to increase the use of condoms by promoting the self esteem of the sex workers and building up their negotiation skills. When sex workers get sexually transmitted diseases most buy medicines to treat themselves or visit unqualified doctors.

With the rapid modernisation and economic development in China, movements of very large populations of rural people seeking work in urban areas have caused concern for potential increase in the sexual transmission of HIV in China.<sup>3-7</sup> The large mobile populations, estimated to be about 100 million, have been identified as being at risk of HIV.

Compared with many neighbouring countries, China is still in an early phase of the epidemic. One reason could be that bridging of the two primary risk populations, the drug users and the sex workers, has not occurred fully. Surveillance data clearly show the discrepancy of HIV prevalence between the two. The HIV infection rate ranges from 0.1% to 5% among sex workers (data from sentinel surveillance programmes) but is as high as 50%-70% in drug users. Most drug users live in relatively remote areas, are less mobile, and poorer. Their sexual drive usually decreases by the time they are HIV positive, which usually happens six months after they start abusing drugs. If the rate of contact between these two populations increases the present situation will become a greater disaster.

About 0.5% of married urban Chinese and 2.3% in rural areas engage in homosexual activities.<sup>7</sup> There are about two to eight million homosexual men in China. This population is at high risk of HIV infection as anal sex is practised commonly.

According to the report of the national system of surveillance for sexually transmitted diseases the incidence of the eight mandatory notifiable diseases

increased 4.2 times in women and 3.9 times in men in 1990-8. The number of patients with sexually transmitted diseases has risen almost 30%.

In response to the spread of HIV/AIDS the government has made a stronger commitment to its prevention. Long and medium term plans for controlling and preventing HIV/AIDS have been developed, and a central government coordinating committee has been formed among 33 ministries. The government has recently approved a series of pilot programmes, such as a methadone maintenance treatment programme and a needle exchange programme for drug users who have gone through detoxification. Vending machines selling condoms have been set up in public places. The hazards related to uncontrolled illegal collection of blood and plasma were realised in 1994 after an outbreak in blood donors, and countermeasures were initiated. A programme has been launched to deal with stigma and discrimination against people with HIV/AIDS. We hope that the current crisis can be controlled. However, the government and society must make immediate and unrestrained efforts for there is no time to lose.

Kong-lai Zhang *professor*

Department of Epidemiology, School of Basic Medicine, Peking Union Medical College, Beijing (100005), China  
(Klzhang@95777.com)

Shao-Jun Ma *chief physician*

Gansu provincial CDC, Lanzhou, Gansu, China 730000

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